

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Previously Presented) An exercise apparatus comprising:  
at least one treadle having at least one tread;  
a master control unit;  
a first sensor, in communication with the master control unit, which generates a first signal indicative of an effective tread speed for the apparatus; and  
a resistive element operably coupled with the at least one treadle, the resistive element including at least one resistance level.
2. (Original) The exercise apparatus of claim 1 further comprising a data structure containing data indicative of the amount of energy expended for a given resistance level.
3. (Original) The exercise apparatus of claim 2, wherein the master control unit accesses the data structure and determines the amount of energy expended based upon at least one of the first signal and at least one resistance level.
4. (Previously Presented) The exercise apparatus of claim 1, further comprising:  
a second sensor in communication with the master control unit  
wherein the at least one treadle has at least a downward movement; and  
wherein the second sensor generates at least one second signal with each downward movement of a treadle.
5. (Original) The exercise apparatus of claim 4, wherein the master control unit calculates the amount of energy expended based upon the received first and second signals.
6. (Original) The exercise apparatus of claim 5, further comprising a data structure containing data indicative of the amount of energy expended for at least one of a given effective

tread speed and a given resistance level; and the master control unit utilizes data from the data structure in calculating the amount of energy expended.

7. (Previously Presented) The exercise apparatus of claim 1 wherein the resistive element imparts a first force upon the treadle in a substantially vertical direction.

8. (Original) The exercise apparatus of claim 7 wherein the force imparted by the resistive element counteracts at least a portion if not all of a second force imparted upon the tread by an exerciser.

9. (Original) The exercise apparatus of claim 7 wherein the master control unit controls the effective tread speed for each of the at least one treads in a substantially horizontal direction.

10. (Previously Presented) The exercise apparatus of claim 1 further comprising a tread control unit, in communication with the master control unit, which controls the rotation of the at least one treadle on the apparatus.

11. (Original) The exercise apparatus of claim 10, wherein the master control unit controls the operation of the tread control unit.

12. (Original) The exercise apparatus of claim 11, wherein the master control unit controls the operation of the tread control unit based at least upon the first signal.

13. (Original) The exercise apparatus of claim 11, wherein the tread control unit further comprises at least one of a D.C. motor and an A.C. motor.

14. (Original) The exercise apparatus of claim 1, wherein the apparatus may be configured such that striding, stepping or combined striding and stepping motions are facilitated by the apparatus.

15. (Original) The exercise apparatus of claim 14, wherein the master control unit determines whether striding, stepping and/or combined striding and stepping motions are to be

facilitated by the apparatus based upon at least one of a desired effective tread speed and a desired resistance level.

16. (Original) The exercise apparatus of claim 15, wherein at least one of the desired effective tread speed and the desired resistance level are specified via a user interface.

17. (Original) The exercise apparatus of claim 14, wherein the master control unit determines that stepping or combined striding and stepping motions are to be facilitated by the apparatus based upon resistance level.

18. (Original) The exercise apparatus of claim 1, wherein the apparatus may be configured to operate as at least one of a treadmill, a stepper and a combined treadmill and stepper.

19. (Original) The exercise apparatus of claim 4, wherein the master control unit determines the amount of calories expended based upon the second signal when the first sensor provides a null reading.

20. (Original) The exercise apparatus of claim 19, wherein the apparatus is configured in stepping mode.

21. (Original) The exercise apparatus of claim 4, wherein the master control unit determines the amount of energy expended based upon the first signal when the second signal provides a null reading.

22. (Original) The exercise apparatus of claim 21, wherein the apparatus is configured in treadmill only mode.

Claims 23-34. (Canceled)